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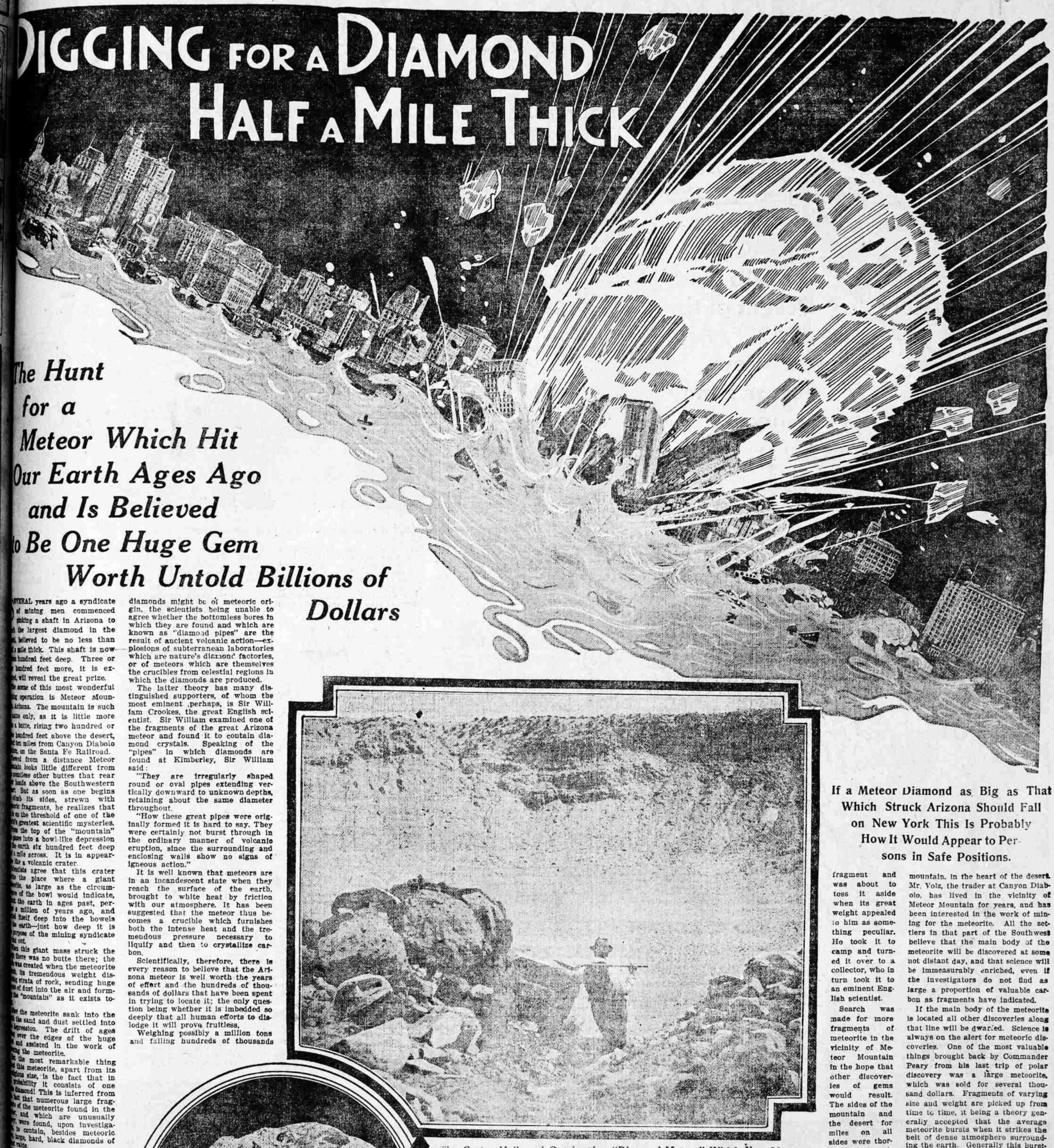
DIGGING FOR A DIAMOND HALF A MILE THICK



The Hunt for a Meteor Which Hit Our Earth Ages Ago and Is Believed to Be One Huge Gem Worth Untold Billions of Dollars

SEVERAL years ago a syndicate of mining men commenced sinking a shaft in Arizona to reach the largest diamond in the world, believed to be no less than half a mile thick. This shaft is now several hundred feet deep. Three or four hundred feet more, it is expected, will reveal the great prize.

The scene of this most wonderful mining operation is Meteor Mountain, Arizona. The mountain is such in name only, as it is little more than a butte, rising two hundred or three hundred feet above the desert, about ten miles from Canyon Diablo station, on the Santa Fe Railroad. Viewed from a distance Meteor Mountain looks little different from the countless other buttes that rear their heads above the Southwestern desert. But as soon as one begins to climb its sides, strewn with volcanic fragments, he realizes that he is on the threshold of one of the world's greatest scientific mysteries. From the top of the "mountain" he looks into a bowl-like depression in the earth six hundred feet deep and a mile across. It is in appearance like a volcanic crater.

Scientists agree that this crater is the place where a giant meteorite, as large as the circumference of the bowl would indicate, struck the earth in ages past, perhaps a million of years ago, and buried itself deep into the bowels of the earth—just how deep it is the purpose of the mining syndicate to find out.

When this giant mass struck the earth there was no butte there; the butte was created when the meteorite struck, its tremendous weight displacing strata of rock, sending huge clouds of dust into the air and forming the "mountain" as it exists today.

After the meteorite sank into the earth the sand and dust settled into the depression. The drift of ages has blown over the edges of the huge hole and assisted in the work of burying the meteorite.

But the most remarkable thing about this meteorite, apart from its prodigious size, is the fact that in all probability it consists of one huge diamond! This is inferred from the fact that numerous large fragments of the meteorite found in the crater, and which are unusually large, were found, upon investigation, to contain, besides meteoric iron, large, hard, black diamonds of great value.

Even if the meteor itself consists only of black daimonds its value would be quite inconceivable, for a single black diamond, though worthless as a gem, is worth even more than a white one for mechanical purposes. It is quite probable, however, that the bulk of the meteor consists of white diamond, in which case there would not be enough wealth in the world to pay for it at the current price of the precious stone.

The largest diamonds in the world, including the Koh-i-noor, the Cullinan, the Great Mogul of Russia, the Nassak, the Great Premier diamond, the Tiffany diamond, the Etoile Polaire, and a dozen others of the same standard, worth in the aggregate hundreds of millions of dollars, would all be placed together in an ordinary derby hat and not reach the top. This meteoric diamond, scientists believe, must be at least a mile thick! The significance of the comparison is apparent.

It has long been supposed that all diamonds might be of meteoric origin, the scientists being unable to agree whether the bottomless bores in which they are found and which are known as "diamond pipes" are the result of ancient volcanic action—explosions of subterranean laboratories which are nature's diamond factories, or of meteors which are themselves the crucibles from celestial regions in which the diamonds are produced.

The latter theory has many distinguished supporters, of whom the most eminent, perhaps, is Sir William Crookes, the great English scientist. Sir William examined one of the fragments of the great Arizona meteor and found it to contain diamond crystals. Speaking of the "pipes" in which diamonds are found at Kimberley, Sir William said:

"They are irregularly shaped round or oval pipes extending vertically downward to unknown depths, retaining about the same diameter throughout.

"How these great pipes were originally formed it is hard to say. They were certainly not burst through in the ordinary manner of volcanic eruption, since the surrounding and enclosing walls show no signs of igneous action."

It is well known that meteors are in an incandescent state when they reach the surface of the earth, brought to white heat by friction with our atmosphere. It has been suggested that the meteor thus becomes a crucible which furnishes both the intense heat and the tremendous pressure necessary to liquify and then to crystallize carbon.

Scientifically, therefore, there is every reason to believe that the Arizona meteor is well worth the years of effort and the hundreds of thousands of dollars that have been spent in trying to locate it; the only question being whether it is imbedded so deeply that all human efforts to dislodge it will prove fruitless.

Weighing possibly a million tons and falling hundreds of thousands of miles, the giant mass must have been travelling at an inconceivable rate of speed when it struck the earth, yet the engineers who have been directing the mining operation believe that it could not have penetrated more than twenty-five hundred feet at the utmost.

If this estimate proves correct, the recovery of the mammoth diamond should be a matter of only a few months now, for there is less than a thousand feet further to dig before that depth is reached.

For many years Meteor Mountain has been the subject of Indian tradition.

The Mokis have a tradition of a blazing star which fell ages ago, when Old Man Coyote was a talking animal and when the oldest of the abandoned cliff houses in the Southwest was new. The legend tells how the Mokis had offended the Great Spirit, and finally a warning was sent in the shape of a blazing star which lighted up the earth for hundreds of miles around and whose shock was so terrific that several Moki villages were all but ruined. The Mokis heeded the warning, and since the falling of the blazing star they have so walked in the paths of rectitude that they are among the favored peoples of Manitou.

Aside from mere curiosity and speculation, the spot where the great meteor fell was of little interest to humanity until a wandering sheepherder, who had been grazing his flocks in the vicinity of Meteorite Mountain, picked up a fragment of meteorite which, besides meteoric iron, proved to contain hard, black diamonds of great value for mechanical purposes.

The earth in the vicinity of Meteorite Mountain is strewn with fragments, evidently loosened from the main body by the terrific impact as the heavenly messenger struck the earth. The herder picked up a large fragment and was about to toss it aside when its great weight appealed to him as something peculiar. He took it to camp and turned it over to a collector, who in turn took it to an eminent English scientist.

Search was made for more fragments of meteorite in the vicinity of Meteor Mountain in the hope that other discoveries of gems would result. The sides of the mountain and the desert for miles on all sides were thoroughly prospected and enough gem carrying specimens were found to indicate that the main body of the meteorite must have been heavily laden with the valuable carbon.

News of the discovery on Meteor Mountain soon leaked out, in spite of strenuous efforts to keep it quiet, and a syndicate was formed to ascertain the position of the great meteorite, if possible. Mining operations were begun at the bottom of the crater, and a shaft was soon being sunk.

There are about forty acres in the bottom of this so-called crater. On all sides a sloping wall rises to a height of from five to six hundred feet. The wall is sandy, and climbing to the top is difficult. The bottom of the depression is covered with huge rocks, some of which weigh many tons, and which are evidently portions of rock strata displaced by the falling meteorite.

The nearest settlement is at Volz's trading post, a few miles from the mountain, in the heart of the desert. Mr. Volz, the trader at Canyon Diablo, has lived in the vicinity of Meteor Mountain for years, and has been interested in the work of mining for the meteorite. All the settlers in that part of the Southwest believe that the main body of the meteorite will be discovered at some not distant day, and that science will be immeasurably enriched, even if the investigators do not find as large a proportion of valuable carbon as fragments have indicated.

If the main body of the meteorite is located all other discoveries along that line will be dwarfed. Science is always on the alert for meteoric discoveries. One of the most valuable things brought back by Commander Peary from his last trip of polar discovery was a large meteorite, which was sold for several thousand dollars. Fragments of varying size and weight are picked up from time to time, it being a theory generally accepted that the average meteorite bursts when it strikes the belt of dense atmosphere surrounding the earth. Generally this bursting is so thorough that the meteorite is scattered into dust, and sifts to earth in that form. Only occasionally do larger fragments survive.

In the case of the Arizona meteorite, however, it would seem that the falling body was so large that the usual process of disintegration did not take place when the dense atmosphere of earth was struck. The giant meteorite kept on falling in a solid, blazing mass, until it was extinguished in the sands of the desert, hundreds of feet below the surface of the earth.

The largest showers of meteors occur in August and November, and exhibit their greatest brilliancy every thirty-three years. Most of these recorded showers are of the smaller variety of meteorites. Nothing approaching the Arizona meteorite has ever been recorded, and all traditions regarding these aerial messengers may be upset when the secret of Meteor Mountain is finally penetrated.

The Crater Hollowed Out by the "Diamond Meteor" Which Now Lies Hundreds of Feet Under Its Floor.

The Cullinan Diamond Exact Size When Found. The Largest Diamond in the World and Worth $1,500,000.

If a Meteor Diamond as Big as That Which Struck Arizona Should Fall on New York This Is Probably How It Would Appear to Persons in Safe Positions.